

Innovative Assessment Demonstration Authority (IADA) Grades 4 and 7 Mathematics Interim Assessment Test Specifications North Carolina Personalized Assessment Tool

Purpose and Overview

The North Carolina Personalized Assessment Tool is a system of through-course assessment opportunities aimed toward a balanced assessment system that will provide granular data for immediate feedback about students' performance throughout the year. The system is currently being developed as a pilot under the U.S. Department of Education's Innovative Assessment Demonstration Authority (IADA) and includes both interim and summative assessments.

The current design purposes of the North Carolina Personalized Assessment Tool are to

- provide educators, students, and stakeholders with immediate and detailed feedback on student performance on grade-level-specific content standards so classroom instruction may be tailored to an individual student's needs;
- provide a progress indicator for each interim on individual student performance in relation to overall grade-level performance expectation; and
- provide a reliable estimate to inform a student's starting point on the multistage adaptive summative assessment that will be used to determine an academic achievement level and for state and federal accountability.

Content Specifications

Grade 4: The North Carolina Department of Public Instruction (NCDPI) Accountability Services/Test Development Section facilitated a test specification workshop as part of the process to gather input from relevant stakeholders. The goal of the test specification workshop was to gain input from teachers and curriculum specialists across the state to guide recommended groupings of grade 4 mathematics content standards for the various Personalized Assessment Tool interims. Participants at the workshop reviewed all fourth-grade mathematics content standards, then prioritized and grouped them into three main categories based on their local curriculum preferences. The proposed content specification for the Personalized Assessment Tool grade 4 mathematics interims are shown in Table 1. Following the test specification workshop, the NCDPI Test Development staff reviewed and summarized panelist recommendations to ensure alignment with other technical design specifications.

Grade 7: As a result of restrictions associated with COVID-19, the NCDPI Accountability Services/Test Development Section was unable to facilitate an in-person test specification workshop to gather input from relevant stakeholders. Instead, a series of surveys was utilized to gather input from IADA program participants across the state. The goal of the test specification surveys was to gain input from teachers and curriculum specialists to guide recommended groupings of grade 7 mathematics content standards for the various Personalized Assessment Tool interims. Participants were asked to review all seventh-grade mathematics content standards and then prioritize them based on their local curriculum preferences. This feedback was used to create proposed content standard groupings for the Personalized Assessment Tool grade 7

mathematics interims. A follow-up survey was utilized to share the proposed content standard groupings with teachers and curriculum specialists to gauge how well the proposed groupings fit their formative assessment data needs. Results from that survey were used to confirm the testing specifications, as seen in Table 2. Finally, the NCDPI Test Development staff reviewed and summarized panelist recommendations to ensure alignment with other technical design specifications.

Throughout this pilot phase, NCDPI intends to collect feedback with the goal of adjusting the content specification of NCPAT interims. It is possible that standards listed under each interim may change before the pilot is finalized.

Table 1. Content Specifications NCPAT Math Grade 4

Grade 4 Mathematics North Carolina Personalized Assessment Tool Interim Assessed Standards		
Interim 1	Interim 2	Interim 3
4.OA.1	4.OA.3	4.NBT.5
4.NBT.2	4.NBT.5	4.NF.3
4.NBT.4	4.NBT.6	4.NF.4
4.NBT.7	4.NF.1	4.NF.6
4.G.1 and 4.MD.3	4.NF.2	4.NF.7
		4.G.2 and 4.MD.4

Table 2. Content Specifications NCPAT Math Grade 7

Grade 7 Mathematics North Carolina Personalized Assessment Tool Interim Assessed Standards		
Interim 1	Interim 2	Interim 3
7.G.1	7.EE.1	7.EE.4
7.NS.3	7.EE.3	7.G.5
7.RP.1	7.EE.4	7.G.6
7.RP.2	7.NS.3	7.SP.7
7.RP.3	7.RP.3	7.SP.8

Interim Format

The NC Personalized Assessment Tool interims are currently being developed as online, fixed-form assessments with twenty-five total items each. Each of the three mathematics interims will include four-option multiple-choice items, open-ended numeric response items, and technology-enhanced items. The grades 4 and 7 mathematics interims will have calculator inactive and calculator active sections.

Administration and Review

The NCDPI will offer a flexible administration and review window for all mathematics interims to accommodate local control of the curriculum. The window for all mathematics interims will open October 1 and close at the end of May. Public school units may choose to administer interims in the order that best aligns with their curriculum. The NCDPI recommends one interim administration per quarter. Proctors are not recommended for the administration of interims. The interims are not timed assessments; however, the estimated time for most students to complete a twenty-five-item interim is about ninety minutes. Schools have the option to administer the interims in one school day or over multiple school days. For multiple school days, the total administration time can be divided into minisessions.

The interim item review window for teachers will also be available from October 1 to the end of May. Like NC Check-Ins, teachers may access interim forms after administration so they can conduct formative reviews with their students. The main purpose of these interims is to provide reliable formative data on grade-level-specific content standards so teachers may adjust instruction. Previewing or disclosing interim content to students before an administration may result in an invalid interpretation about student performance on grade-level-specific content standards.

IADA Pilot 2021–22

During the 2021–22 school year, the IADA will consist of only three interims that will be used to provide educators, students, and stakeholders with immediate and detailed feedback on student performance on grade-level-specific content standards so that classroom instruction may be tailored to an individual student's needs.

The multistaged adaptive summative assessment for IADA will be administered in the 2022–23 school year. Students will need to complete at least two interims by April 15, 2023, otherwise data from their interims will not be used to inform the multistage adaptive summative.